

APPENDIX A

1. A purified BMP-8 protein characterized by:

(a) the following sequences:

- i) Arg-His-Glu-Leu-Tyr-Val-Ser-Phe-Gln-Asp-Leu-Gly-Trp-Leu-Asp-Trp-Val-Ile-Ala-Pro-Gln-Gly-Tyr (SEQ ID NO:1);
- ii) Leu-Ser-Ala-Thr-Ser-Val-Leu-Tyr-Tyr-Asp-Ser-Ser-Asn-Asn-Val-Ile-Leu-Arg (SEQ ID NO: 2); and
- iii) Ala-Cys-Cys-Ala-Pro-Thr-Lys (SEQ ID NO: 3);

(b) a molecular weight of 28,000 - 38,000 daltons as determined by sodium dodecyl sulfate polyacrylamide gel electrophoresis; and

(c) a molecular weight of 14,000 - 20,000 daltons under reducing conditions as determined by sodium dodecyl sulfate polyacrylamide gel electrophoresis said protein being a disulfide linked dimer wherein each of the subunits contains the sequences set forth in part (a) and said protein having the ability to induce the formation of cartilage and/or bone.

26. A pharmaceutical formulation for bone and/or cartilage formation comprising an effective amount of a BMP-8 protein of claim 1 in a pharmaceutically acceptable vehicle.

27. A composition of claim 26 further comprising a matrix for supporting said composition and providing a surface for bone and/or cartilage formation.

28. The composition of claim 27 wherein said matrix comprises a material selected from the group consisting of hydroxyapatite, collagen, polylactic acid and tricalcium phosphate.

29. A pharmaceutical composition for wound healing and tissue repair said composition comprising an effective amount of a BMP-8 protein of claim 1 in a pharmaceutically acceptable vehicle.